4. (Twice Amended) A semiconductor device comprising:

an insulated gate field effect transistor comprising a pair of main electrodes used as a source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region including at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region including the first group IV element and formed on the first region; and

a silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second group IV element.

- 5. (Twice Amended) The semiconductor device of claim 4, wherein the first group IV element of the gate electrode is Si (silicon), the second group IV element of the gate electrode is Ge (germanium), and the silicide electrode includes a CoSi<sub>y</sub>, or TiSi<sub>y</sub> layer which is substantially free from Ge.
- 6. (Twice Amended) The semiconductor device of claim 5, wherein the first region of the gate electrode has a thickness larger than a width of a depletion layer of the gate electrode that includes Si.
- 10. (Twice Amended) The semiconductor device of claim 4, wherein the first group IV element of the gate electrode is Si, the second group IV element of the gate electrode is C (carbon), and the silicide electrode includes a CoSi<sub>y</sub>, or TiSi<sub>y</sub> layer which is substantially free of C.
  - 11. (Twice Amended) A semiconductor device comprising:

an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region including at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region including a multiple element compound including at least the first and second group IV elements and metal, and formed on the first region; and

Application Serial No. 09/440,928

Attorney Docket 040301-0578

a silicide electrode formed in contact with the second region of the gate electrode, including the first group IV element and metal, and being substantially free from the second group IV element.

15. (Twice Amended) A semiconductor device comprising:

a semiconductor region of a first conductivity type;

an epitaxial growth layer formed on the semiconductor region and having a first region of the first conductivity type including at least a first group IV element and a second group IV element and formed in contact with the semiconductor region and a second region of the first conductivity type including the first group IV element and formed in contact with the first region; and

a silicide electrode formed on the second region of the epitaxial growth layer.

(Twice Amended) A semiconductor device comprising:

an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes, an insulating gate film adjacent to the pair of main electrodes, and a gate electrode comprising a first region including at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region including the first group IV element and formed on the first region;

a respective elevated electrode formed on the main electrodes, and having a third region including a third group IV element and a fourth group IV element and a fourth region formed on the third region and including the third group IV element;

a first silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second group IV element; and

a second silicide electrode formed in contact with the fourth region of the elevated electrode, and being substantially free from the fourth group IV element.

25. (Twice Amended) The semiconductor device of claim 1, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and includes the first group IV element or the second group IV element.

- 26. (Twice Amended) The semiconductor device of claim 4, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and includes the first group IV element or the second group IV element.
- 27. (Twice Amended) The semiconductor device of claim 11, wherein a layer is added between the insulating gate film and the first region of the gate electrode, is thinner than the first region, and includes the first group IV element or the second group IV element.

## 28. (Amended) A semiconductor device comprising:

an insulated gate field effect transistor having a pair of main electrodes used as source and drain electrodes of a first conductivity type, an insulating gate film adjacent to the a pair of main electrodes, and a gate electrode comprising a first region including at least a first group IV element and a second group IV element and formed in contact with the insulating gate film, and a second region including the first Group IV element and formed in contact with the first region;

a respective elevated electrode of the first conductivity type formed on the main electrodes, and having a third region including a third Group IV element and a fourth Group IV element and formed in contact with the respective main electrodes, and a fourth region formed in contact with the third region and including the third Group IV element;

a first silicide electrode formed in contact with the second region of the gate electrode, and being substantially free from the second Group IV element; and

a second silicide electrode formed in contact with the fourth region of the elevated electrode, and being substantially free from the fourth Group IV element.

